WHAT IS CLAIMED IS:

1. A method of charging a plurality of batteries comprising:

charging a first battery with a constant current until a voltage of said first battery becomes greater than a reference voltage;

charging a second battery with said constant current until a voltage of said second battery becomes greater than said reference voltage;

resuming charging of said first battery until one of a charging current is less than a reference current and the charging current is less than a limit current indicating a state of full charge; and

resuming charging of said second battery until one of said charging current is less than said reference current and a charging current is less than said limit current indicating said state of full charge.

2. The method of claim 1, wherein said reference voltage is between approximately 70% and approximately 80% of a full charging voltage.

3. The method of claim 1, wherein said reference current is a current value at a time of approximately 80% of a full charging voltage.

4. The method of claim 1, wherein said limit current is a current value at a time of approximately 95% of a full charging voltage.

5. A method of charging a plurality of batteries comprising:

alternatively charging each of a plurality of batteries until a charging voltage of each of said plurality of batteries becomes a reference voltage;

resume charging the first battery until a charging current of the first battery is less than a reference current; and

further resuming charging of the first battery until said charging current of the first battery is less than a limit current indicating a state of full charging.

6. The method of claim 5, further comprising:

resume charging of the second battery until a charging current of the second battery is less than a reference current.

7. The method of claim 6, further comprising:

further resuming charging of the second battery until the charging current of the second battery is less than a limit current indicating a state of full charge.

8. The method of claim 5, wherein alternatively charging each of a plurality of batteries comprises:

charging a first battery with a constant current until a charging voltage becomes a first reference voltage;

charging a second battery with a constant current until a charging voltage becomes a second reference voltage;

charging a third battery with a constant current until a charging voltage becomes a third reference voltage; and

charging a fourth battery with a constant current until a charging voltage becomes a fourth reference voltage.

9. The method of claim 5, further comprising:

resume charging of the second battery until a charging current of the third battery is less than a reference current.

10. The method of claim 9, further comprising:

further resuming charging of the second battery until the charging current of the third battery is less than a limit current indicating a state of full charge.

11. The method of claim 5, wherein said reference voltage is between approximately 70% and approximately 80% of a full charging voltage.

12. The method of claim 5, wherein said reference current is a current value at a time of approximately 80% of a full charging voltage.

13. The method of claim 5, wherein said limit current is a current value at a time of approximately 95% of a state of a full charging voltage.

14. A method of charging a plurality of batteries comprising:

identifying a charging voltage/current characteristic of at least one of the plurality of batteries;

charging the first battery based on a first charging voltage/current characteristic of said first battery;

charging said second battery based on a first charging voltage/current characteristic of said second battery;

stopping charging of the first battery based on a second charging voltage/current characteristic of said first battery; and

complete charging of one of the first battery and the second battery based on the voltage/current characteristic of said one of the first battery and the second battery.

15. The method of claim 14, wherein said charging voltage/current characteristic has one of a voltage gradient and a current gradient according to a charging voltage/current of said first battery.

16. The method claim 15, wherein when said voltage of said first battery gradually rises, said current goes to a constant current and then said current gradient goes to substantially zero, thereby said voltage of said first battery having a predetermined gradient, and wherein when said first battery is charged by some degree of charging, said current drops, said current gradient has a negative value, and then said first battery has a constant voltage zone, thereby said voltage of said voltage gradient being substantially zero.

17. The method of claim 15, wherein in said first charging voltage/current characteristic, said voltage gradient is more than zero and a charging voltage has a reference of approximately 4.0V, and wherein a charging current has references of approximately 100mA and approximately 200mA.

18. The method of claim 15, wherein in said second charging voltage/current characteristic, said voltage gradient is more than zero and a charging voltage has a reference of approximately 4.2V, and wherein a charging current has references of approximately 100mA and approximately 200mA.

19. The method of claim 15, wherein in said first battery charging, said voltage gradient of said first battery is not more than zero, and a charging voltage of said first battery is not more than approximately 4.0V, and wherein if said voltage gradient is not more than zero and said charging current is not more than approximately 100mA and not less than approximately 200mA, then said first battery is charged and said second battery is not charged.

20. The method of claim 15, wherein in said second battery charging, said voltage gradient of said second battery is more than zero, and a charging voltage of said second battery is not more than approximately 4.0V; and wherein if said voltage gradient is not more than zero and said charging current is not more than approximately 100mA and not

less than approximately 200mA, then said second battery is charged and said first battery is not charged.

21. The method of claim 15, wherein in said first battery charging, said voltage gradient of said first battery is more than zero, and a charging voltage of said first battery is less than approximately 4.2V, and wherein if said voltage gradient is not more than zero and said charging current is not less than approximately 200mA, then said first battery is charged and said second battery is not charged.

22. The method of claim 15, wherein in said second battery charging, said voltage gradient of said second battery is more than zero, and a charging voltage of said second battery is not less than 4.2V, and wherein if said voltage gradient is not more than zero and said charging current is not less than 200mA, then said second battery is charged and said first battery is not charged.

23. The method of claim 15, wherein in said charging completion, if said voltage gradient of said first or second battery is not more than zero, and a charging current is less than 200mA and not more than 100mA, then charging operation is completed.

24. The method of claim 15, wherein in said first battery charging, a voltage and a current are an initial rising voltage and an initial constant current applied to said first battery, respectively.

25. An apparatus to charge a plurality of batteries comprising:

a first circuit to apply at least one of constant voltage and constant current to a first battery;

a second circuit to apply at least one of constant voltage and constant current to a second battery; and

a control circuit to control operations of the first circuit and the second circuit such that the first battery and the second battery are alternatively charged and such that the first battery is charged based on charging voltage/current characteristics of the first battery and the second battery is charged based on charging voltage/current characteristics of the second battery.

26. The apparatus of claim 25, wherein the charging voltage/current characteristics relate to a reference voltage.

27. The apparatus of claim 26, wherein said reference voltage is between approximately 70% and approximately 80% of a full charging voltage.

28. The apparatus of claim 25, wherein the charging voltage/current characteristics relate to a reference current.

29. The apparatus of claim 28, wherein said reference current is a current value at a time of approximately 80% of a full charging voltage.

30. The apparatus of claim 25, wherein the charging voltage/current characteristics relate to a limit current.

31. The apparatus of claim 30, wherein said limit current is a current value at a time of approximately 95% of a full charging voltage.